

Plants

Statutory requirements

Pupils should be taught to:

- ♣ identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- ♣ identify and describe the basic structure of a variety of common flowering plants, including trees.

Notes and guidance (non-statutory)

Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted. They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.

Year Group = 1

Opportunities to promote curiosity:

Different varieties of leaves

Leaf hunt

Simple flower dissection

AFL Questions:

- What is the difference between evergreen and deciduous trees – linking to seasons. When do we notice this difference? Why is this?
- How do these fit together? Stem flower Bark leaves
- What's the difference between wild and garden plants?
- Why do trees and plants not have flowers all year round?
- What role do the roots of a plant play?

Animals, including humans

Statutory requirements

Pupils should be taught to:

- ♣ identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- ♣ identify and name a variety of common animals that are carnivores, herbivores and omnivores Science – key stages 1 and 2 8 Statutory requirements
- ♣ describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- ♣ identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Notes and guidance (non-statutory)

Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Pupils should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets. Pupils should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes. Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.

Year Group = 1

Opportunities to promote curiosity:

Large picture/poster of the human body.

Selection of animals (toys) How can we sort them? How can we group them?

Video clips of animal groups.

AFL Questions:

- Can you name some mammals? Birds – How do we know they are? Can all birds fly?
- Tell me some body parts of animals which are the same/different to humans?
- Can you name some animals that are herbivores? What do they not eat?
- What would happen if someone was missing a body part e.g. a leg? (link to disability awareness). Are there any body parts that a human cannot live without? What about animals?
- How do we use our senses in everyday life?

Everyday materials

Statutory requirements

Pupils should be taught to:

- ♣ distinguish between an object and the material from which it is made
- ♣ identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- ♣ describe the simple physical properties of a variety of everyday materials
- ♣ compare and group together a variety of everyday materials on the basis of their simple physical properties. Science – key stages 1 and 2 9

Notes and guidance (non-statutory)

Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent. Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil. Pupils might work scientifically by: performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?'

Year Group = 1

Opportunities to promote curiosity:

A selection of toys (topic link) and everyday objects – how can we sort them?

Box of magnets (for introducing property magnetic).

Teddy – How can we keep him dry?

AFL Questions:

- Name some objects made from _____ (e.g. wood) What could you use wood to make in everyday life? Is there anything that wood would not be a suitable building material for?
- Is this material waterproof? How can we find out?
- Tell me some properties of _____ (e.g. metal) How could we test if a material had these properties?
- Can you tell me what objects that are magnetic? What objects would they pick up? Objects it wouldn't pick up. Why?
- Why don't we make windows out of paper? – Properties that a window needs to have.

Seasonal changes

Statutory requirements

Pupils should be taught to:

- ♣ observe changes across the four seasons
- ♣ observe and describe weather associated with the seasons and how day length varies.

Notes and guidance (non-statutory)

Pupils should observe and talk about changes in the weather and the seasons. Note: Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses. Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.

Year Group = 1

Opportunities to promote curiosity:

Green/yellow leaf

Melted snowman

AFL Questions:

- One thing specific to each season.

- When would we use a raincoat? Why?
- Picture of a bed at 20:00, the curtains are drawn but it is light. Sam thinks he shouldn't be in bed. Why? Is he right?
- Why do the seasons change?
- How is the length of the day at different times of year linked to the sun?